

PRODUCT DATA SHEET

Product Reference:	Domer SkyDome
Type:	Single Layer Thermoformed Polycarbonate Dome
Sizes:	According to project requirements
Color:	Clear, Opal, Green, Blue, Yellow, Red, Bronze, Grey, light diffusion (other colors upon request)
UV Protection:	Co-extruded UV protection which eliminates min 99% of harmful ultraviolet radiation
Thermal & Visual Properties:	Considering below combination: <ul style="list-style-type: none">◦ Top Layer: SkyDome polycarbonate• U-Value: 5.7 W/m²K• Light Transmission: 85-90 % for clear colors (above LT value is based on the clear color of all layers)
Handling & Storage:	Refer to Domer Technical Guide
Installation & Fixing:	Refer to Domer Technical Guide

DOMER SKYDOME

PROPERTIES

Mechanical properties (23 °C/50 % r. h.)				
Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2400
Yield stress	50 mm/min	MPa	ISO 527-1,-2	65
Yield strain	50 mm/min	%	ISO 527-1,-2	6.3
Nominal strain at break	50 mm/min	%	ISO 527-1,-2	> 50
Stress at break	50 mm/min	MPa	ISO 527-1,-2	70
Strain at break	50 mm/min	%	b.o. ISO 527-1,-2	130
Tensile creep modulus	1h	MPa	ISO 899-1	2200
Tensile creep modulus	1000 h	MPa	ISO 899-1	1900
Flexural modulus	2 mm/min	MPa	ISO 178	2400
Flexural strength	2 mm/min	MPa	ISO 178	98
Flexural strain at flexural strength	2 mm/min	%	ISO 178	7
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178	74
Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	N
Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	N
Charpy impact strength	-60 °C	kJ/m ²	ISO 179-1eU	N
Charpy notched impact strength	23 °C; 3 mm	kJ/m ²	ISO 7391/b.o. ISO 179-1eA	80P
Charpy notched impact strength	-30 °C; 3 mm	kJ/m ²	ISO 7391/b.o. ISO 179-1eA	14C
Izod notched impact strength	23 °C; 3 mm	kJ/m ²	ISO 7391/b.o. ISO 180-A	70P
Izod notched impact strength	-30 °C; 3 mm	kJ/m ²	ISO 7391/b.o. ISO 180-A	20C(P)
Puncture maximum force	23 °C	N	ISO 6603-2	5600
Puncture maximum force	-30 °C	N	ISO 6603-2	6500
Puncture energy	23 °C	J	ISO 6603-2	60
Puncture energy	-30 °C	J	ISO 6603-2	70
Ball indentation hardness		N/mm ²	ISO 2039-1	112

Thermal properties				
Glass transition temperature	10 °C/min	°C	ISO 11357-1,-2	146
Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	127
Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	140
Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	146
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	147
Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.65
Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.65
Oxygen index	Method A	%	ISO 4589-2	28
Resistance to heat (ball pressure test)		°C	IEC 60695-10-2	139
Relative temperature index (Tensile strength) [UL recognition]	1.5 mm	°C	UL 746B	125
Relative temperature index (Tensile impact strength) [UL recognition]	1.5 mm	°C	UL 746B	115
Relative temperature index (Electric strength) [UL recognition]	1.5 mm	°C	UL 746B	125
Burning rate (US-FMVSS)	>=1.0 mm	mm/min	ISO 3795	passed
Relative permittivity	100 Hz	-	IEC 60250	3.1
Relative permittivity	1 MHz	-	IEC 60250	3
Dissipation factor	100 Hz	10 ⁻⁴	IEC 60250	10
Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	95
Volume resistivity		Ohm·m	IEC 60093	1.00E+14
Surface resistivity		Ohm	IEC 60093	1.00E+16
Electrical strength	1 mm	kV/mm	IEC 60243-1	34
Comparative tracking index CTI	Solution A	Rating	IEC 60112	250
Comparative tracking index CTI M	Solution B	Rating	IEC 60112	125M
Electrolytic corrosion		Rating	IEC 60426	A1

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